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## PENDING CLAIMS

- A process for minimizing thermal aggregation of DNase in a liquid solution comprising 9. introducing a DNase aggregation-inhibiting amount of sugar to a solution comprising DNase, and elevating the temperature of said DNase solution above 37°C temperature.
- A process according to claim 9, wherein the temperature of said solution is elevated 10. above about 60°C.
- A process according to claim 9, further comprising reducing the pH of said solution 11. below pH 7.0.
- A process according to claim 11, wherein said solution is at about pH 6.5. 12.
- A process according to claim 11, wherein said solution is at about pH 6. 13.
- A process according to claim 11, wherein said solution is at about pH 5. 14.
- A process according to claim 9, wherein said sugar is present in an amount from 50 15. mg/ml to 200 mg/ml.

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- A process according to claim 9, wherein said sugar is α-lactose monohydrate, mannitol, 16. trehalose or sucrose.
- The process according to claim 9, further comprising the steps of spray-drying said liquid 17. solution and collecting the spray-dried product as a respirable DNase-containing powder that is therapeutically effective when administered into the lung of an individual.
- A DNase solution comprising DNase and a DNase aggregation-inhibiting amount of 18. sugar wherein said DNase solution is minimally aggregated when said solution is at a temperature greater than 37°C.
- A DNase solution according to claim 18, wherein the temperature is greater than about 19. 60°C.
- A DNase solution according to claim 18, wherein said solution is further kept at a pH 20. below 7.0.
- A DNase solution according to claim 20, wherein said solution is at about pH 6.5. 21.
- A DNase solution according to claim 20, wherein said solution is at about pH 6. 22.

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- 23. A DNase solution according to claim 18, wherein said sugar is present in an amount from 50 mg/ml to 200 mg/ml.
- 24. A DNase solution according to claim 18, wherein said sugar is  $\alpha$ -lactose monohydrate, mannitol, trehalose or sucrose.
- 25. A DNase solution according to claim 18 that is further spray-dried to a respirable DNase-containing powder that is therapeutically effective when administered into the lung of an individual.